

MM 97-128 1/4/89

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Federal Communications Commission

Office of the Secretary

OF COUNSEL

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LEO RESNICK

TELECOPIER NUMBER

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July 28, 1989

HAND DELIVERED

Donna R. Searcy, Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

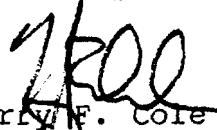
Re: ARN-831202KF

Dear Ms. Searcy:

Submitted herewith in triplicate on behalf of Shurberg Broadcasting of Hartford ("SBH") is an amendment to its above-referenced application (File No. ARN-831202KF) for a construction permit for a new television station to operate on Channel 18 in Hartford, Connecticut.

Please call me if you have any questions about this matter.

Sincerely,

  
Harry F. Cole

Counsel for Shurberg Broadcasting  
of Hartford

RECEIVED

JUL 28 1989

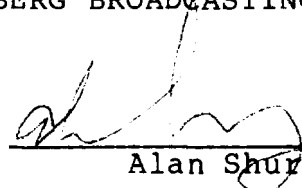
AMENDMENT

Federal Communications Commission  
Office of the Secretary

The application (File No. ARN-831202KF) of Shurberg Broadcasting of Hartford ("SBH") for a construction permit for a new commercial UHF television station to operate on Channel 18 in Hartford, Connecticut is hereby amended to substitute the attached materials for the corresponding portions of the application as originally filed. The application is also amended to include the attached certification concerning reasonable assurance of the availability of the transmitter site specified in this amendment.

SHURBERG BROADCASTING OF HARTFORD

By:

  
Alan Shurberg

Date:

7/28/89

Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section ☒ Yes ☐ No  
V of this form, as the location of its transmitting antenna, will be available to the applicant for  
the applicant's intended purpose?

Exhibit No.  
DNA

If No, attach as an Exhibit, a full explanation.

If reasonable assurance is not based on applicant's ownership of the proposed site or structure,  
applicant certifies that it has obtained such reasonable assurance by contacting the owner or  
person possessing control of the site or structure.

Name of Person Contacted Ben Gauboury  
Antenna Site Manager, Motorola Communications

Telephone No. (include area code) (201) 447-4600

Person contacted: (check one box below)

☐ Owner

☐ Owner's Agent

☒ Other (specify) Lessor/operator

EXHIBIT E  
ENGINEERING STATEMENT  
ON BEHALF OF  
SEURBERG BROADCASTING OF HARTFORD  
IN SUPPORT OF AN AMENDMENT TO APPLICATION FILE 831202KF  
NEW TELEVISION STATION  
CH. 18 3300 KW NON-D 244 METERS HAAT  
HARTFORD, CONNECTICUT

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EXHIBIT E  
ENGINEERING STATEMENT  
ON BEHALF OF  
SHURBERG BROADCASTING OF HARTFORD  
IN SUPPORT OF AN AMENDMENT TO APPLICATION FILE 831202KF  
NEW TELEVISION STATION  
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# Section V-C - TV BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. \_\_\_\_\_  
 ASB Referral Date \_\_\_\_\_  
 Referred by \_\_\_\_\_

Name of Applicant

Shurberg Broadcasting of Hartford

Call letters (if issued)

Not Issued

Purpose of Application (check appropriate box):

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Construct a new (main) facility            | <input type="checkbox"/> Construct a new auxiliary facility                         |
| <input type="checkbox"/> Modify existing construction permit for main facility | <input type="checkbox"/> Modify existing construction permit for auxiliary facility |
| <input type="checkbox"/> Modify licensed main facility                         | <input type="checkbox"/> Modify licensed auxiliary facility                         |

If purpose is to modify, indicate nature of change(s) by checking appropriate box(es), and specify the file number(s) of the authorization(s) affected:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Antenna supporting-structure height  | <input checked="" type="checkbox"/> Effective radiated power |
| <input checked="" type="checkbox"/> Antenna height above average terrain | <input type="checkbox"/> Frequency                           |
| <input checked="" type="checkbox"/> Antenna location                     | <input checked="" type="checkbox"/> Antenna system           |
| <input type="checkbox"/> Main Studio location                            | <input type="checkbox"/> Other (Summarize briefly)           |

File Number(s) Pending Application, File Number 831202KF

1. Allocation:

Channel No.	Offset (check one)	Principal community to be served:	Zone (check one)
	<input type="checkbox"/> Plus	City Hartford	<input checked="" type="checkbox"/> I
	<input checked="" type="checkbox"/> Minus	County Hartford	<input type="checkbox"/> II
18	<input type="checkbox"/> Zero	State CT	<input type="checkbox"/> III

2. Exact location of antenna:

(a) Specify address, town or city, county and state. If no address, specify distance and bearing to the nearest landmark.

67-69 Birch Mountain Road, Glastonbury, Hartford County, Connecticut

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude and West Longitude will be presumed.

Latitude	41°	42'	31"	Longitude	72°	28'	26"
----------	-----	-----	-----	-----------	-----	-----	-----

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. does not apply

If proposal involves a change in height of an existing structure, specify existing height above ground level, including antenna, all other appurtenances, and lighting, if any. does not apply

## SECTION V-C - TV BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	°	'	"	Longitude	°	'	"
----------	---	---	---	-----------	---	---	---

5. Has the FAA been notified of the proposed construction?

☒ Yes ☐ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.  
EDate July 24, 1989 Office where filed New England Regional Office  
Burlington, Ma.

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

Landing Area	Distance (km)	Bearing (degrees True)
(a) <u>No landing areas within 8 kilometers</u>		
(b) _____		

(a) Elevation: (to the nearest meter)

(1) of site above mean sea level; 268 meters(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 112 meters(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)]. 380 meters

(b) Height of antenna radiation center: (to the nearest meter)

(1) above ground; 101 meters(2) above mean sea level [(aX1) + (bX1)]; and 369 meters(3) above average terrain. 244 meters

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of TV radiator.

Exhibit No.  
E9. Maximum visual effective radiated power 3300 kW

SECTION V-C - TV BROADCAST ENGINEERING DATA (Page 3)

10. Antenna:

(a) Manufacturer Bogner (b) Model No. BUH-32-0-18

(c) Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, specify major lobe azimuth(s) does not apply degrees True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.685.

Exhibit No.  
DNA

(d) Is electrical beam tilt proposed?

☒ Yes ☐ No

If Yes, specify -0.5 degrees electrical beam tilt and attach as an Exhibit all data specified in 47 C.F.R. Section 73.685.

Exhibit No.  
E

(e) Is mechanical beam tilt proposed?

☐ Yes ☒ No

If Yes, specify DNA degrees mechanical beam tilt toward azimuth DNA degrees True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.685.

Exhibit No.  
DNA

(f) The proposed antenna is (check only one box)

☒ horizontally polarized ☐ circularly polarized ☐ elliptically polarized

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.685(a) and (b)?

☒ Yes ☐ No

If No, attach as an Exhibit justification therefor, including amounts and percentages of population and area that will not receive City Grade service.

Exhibit No.  
DNA

12. Will the main studio be located within the station's predicted principal community contour as defined by 47 C.F.R. Section 73.685(a)?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.  
DNA

13. Does the proposed facility satisfy the requirement of 47 C.F.R. Section 73.610?

☒ Yes ☐ No

If No, attach as an Exhibit justification therefor, including a summary of any previously granted waiver(s).

Exhibit No.  
DNA

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters; or (b) in the general vicinity, any nonbroadcast (except citizens band or amateur) radio stations or any established commercial or government receiving stations?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of the expected, undesired effects of operations and remedial steps to be pursued, if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by intermodulation) to facilities in existence or authorized prior to grant of this application. (See 47 C.F.R. Sections 73.685(d) and (g).)

Exhibit No.  
E

15. Attach as an Exhibit a topographic map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the provisions of 47 C.F.R. Section 73.684(g). The map must further display clearly and legibly the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.  
E



SECTION V-C - TV BROADCAST ENGINEERING DATA (Page 4)

16. Attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) which shows clearly, legibly and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
E

(a) The proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) The City Grade, Grade A and Grade B predicted contours; and

(c) The legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted Grade B contour.

Area 17,049 sq. km. Population 2,979,444

18. For an application involving an auxiliary facility only, attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
DNA

(a) The proposed auxiliary Grade B contour; and

(b) The Grade B contour of the licensed main facility for which the applied-for facility will be the auxiliary.

(Main facility license file number does not apply)

19. Terrain and Coverage Data (To be calculated in accordance with 47 C.F.R. Section 73.686.)

Source of terrain data: (check only one box below)

☒ Linearly interpolated 60-second database (Source: NGDC accessed through Datavworld, Inc.)

☐ 75 minute topographic map

☐ Other (briefly summarize)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances		
		To the City Grade Contour (kilometers)	To the Grade A Contour (kilometers)	To the Grade B Contour (kilometers)
* 291	314	53.5	62.6	80.3
0	230	48.7	57.2	72.1
45	205	47.2	55.6	70.1
90	207	47.3	55.7	70.3
135	226	48.5	57.0	71.8
180	228	48.6	57.1	72.0
225	233	48.9	57.4	72.3
270	318	53.8	62.9	80.8
315	302	52.9	61.9	79.1

\*Radial through principal community, if not one of the major radials. This radial should NOT be included in calculation of HAAT.

SECTION V-C - TV BROADCAST ENGINEERING DATA (Page 5)

20. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact?

☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.


Exhibit No.  
DNA

If No, explain briefly why not.

Categorically excluded from environmental processing pursuant to Section 1.1306 of the FCC Rules. See Exhibit E for discussion and non-ionizing radiation calculations.

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) Kenneth Devine	Relationship to Applicant (e.g., Consulting Engineer) Technical Consultant
Signature 	Address (Include ZIP Code) Broadcast Technical, Inc. P.O. Box 13475 New Orleans, La. 70185
Date July 24, 1989	Telephone No. (Include Area Code) ( 504 ) 866-3846

**EXHIBIT E**  
**ENGINEERING STATEMENT**  
**ON BEHALF OF**  
**SHURBERG BROADCASTING OF HARTFORD**  
**IN SUPPORT OF AN AMENDMENT TO APPLICATION FILE 831202KF**  
**NEW TELEVISION STATION**  
**CH. 18 3300 KW NON-D 244 METERS HAAT**  
**HARTFORD, CONNECTICUT**

**INTRODUCTION**

This engineering statement, together with Section V-C of FCC Form 301 to which it is attached as Exhibit E, furnishes technical data in support of an amendment to an application on file by Shurberg Broadcasting of Hartford which seeks the facilities of and is mutually exclusive with WHCT, Channel 18, Hartford, Connecticut. The file number which the instant application proposes to amend is 831202KF.

The instant application proposes to change antenna location, effective radiated power, antenna system, antenna height above average terrain and antenna supporting structure height from that proposed in the original application.

All calculations, contours and other technical information contained in or attached to this statement have been determined in accordance with the existing rules of the Federal Communications Commission (FCC Rules).

**ALLOCATION STUDY**

Figure 1 of this exhibit presents the results of a detailed channel allocation study. As shown in Figure 1, the proposed facilities meet the spacing requirements for commercial stations based on the Commission's Rules regarding protection of existing stations and assignments. There are no stations or assignments located near enough to the proposed transmitter site to require a more detailed allocation study.

## **TRANSMITTER, STUDIO AND REMOTE CONTROL LOCATIONS**

The proposed antenna site is located in Hartford County, at 67-69 Birch Mountain Road in Glastonbury, Connecticut. The exact location is shown on Figure 2, which is a full size reproduction of a section of the Marlborough Quadrangle map. The studios and remote control location will be located within the city limits of Hartford at a site to be determined.

## **TOWER AND ANTENNA SYSTEM**

The antenna system to be employed for the proposed Channel 18 operation at Hartford will consist of a Bogner BUH-32-O-18 horizontally polarized, non-directional transmitting antenna, which will be adjusted for  $-1/2$  degree electrical beam tilt. The proposed vertical plane radiation pattern is attached as Figure 6. The transmitter will be coupled to the antenna by means of a circular waveguide with a resulting peak effective radiated power (visual) of 3300 kW.

The Bogner antenna will be top mounted on a new self supported antenna tower as shown in the antenna sketch attached as Figure 3.

## **ELEVATION AND CONTOUR DATA**

The elevation data used in predicting the locations of the contours for the proposed Hartford TV operation were obtained along the eight radials illustrated on the map attached as Figure 5. The data employed were determined using a computer method in accordance with the procedures specified in Section 73.312(d) using the 30 Second Point Data File of the National Geophysical Data Center, accessed through Dataworld, Inc., Washington, D.C.

Average elevations, as well as distances to predicted contours are tabulated on Figure 4. The contour data of Figure 4 were determined through a computer method which is similar to the method outlined in Section 73.313 of the FCC Rules.

The City Grade (80 dbu), Grade A (74 dbu), and Grade B (64 dbu) contours have been plotted from that data and are shown, along with the shaded legal boundaries of Hartford on the coverage map attached as Figure 5.

The City Grade contour was computed using the appropriate depression angle and relative field for each azimuth. The Grade A and B contours were computed at the maximum radiation after determining that the relative field on the vertical plane is greater than 0.9 for all relevant azimuths.

#### **POPULATION AND AREAS**

The Dataworld, Inc., Popcount population counting program was utilized to establish a population estimate of 2,979,444 persons residing within the proposed Grade B (64dBu) contour. This program utilizes 1980 census data and assumes uniform distribution of population within each census tract.

The land area (17,049 square kilometers) within the predicted Grade B (64 dBu) contour was also computed by Dataworld, Inc., on the basis of the distances to the Grade B contour listed in Figure 4.

#### **AERONAUTICAL AND ENVIRONMENTAL IMPACT CONSIDERATIONS**

The proposed antenna installation would utilize a newly constructed 91 meter self supporting tower structure with the TV antenna top mounted resulting in a 101 meter structure. FAA Form 7460-1 has been filed as indicated in

section V-C, paragraph 5, and is attached to this report as Figure 7.

The proposed antenna construction is located in an "antenna farm" area with at least five similar tower structures utilized for non-broadcast radio and low power television services located within 500 meters of the proposed site.

Applicant has received permission from the lessor/operator of the proposed site to remove four existing tower structures from the immediate vicinity and replace them with a new structure which would be utilized by the existing non-broadcast services and the proposed Channel 18 operation. It is the intent of the applicant to minimize its impact in the vicinity of the proposed site and to try and improve the "antenna farm" area in which it is proposing to locate.

The site is not believed to be located in any officially designated wilderness area, wildlife preserve, known natural flyway or near to any culturally, historically, architecturally, or archaeologically significant feature.

The site is not located in a floodplain, and no change in the character of the site is proposed as a part of the construction. No change in grade or land surface is proposed. The site will experience little change in human presence as a result of the proposed construction. High intensity white lights are not currently in use at the proposed site and are not proposed at this time.

Accordingly, it is believed that the facilities proposed in the instant application are categorically excluded from environmental processing pursuant to Sections 1.1306 and 1.1307 of the Commission's Rules.

## COMPLIANCE WITH GUIDELINES FOR EXPOSURE TO RADIOFREQUENCY ENERGY

In accordance with the new section 1.1305(d) of the Commission's rules, an assessment was made of the proposed facility's radio frequency radiation levels. Table 1 of OST Bulletin No. 65 dated October, 1985 was utilized to determine that the proposed facility would not exceed any standards for radio frequency radiation as defined by ANSI C95.1-1982.

The ground level power density was calculated using the methods outlined within OST Bulletin 65. The proposed Channel 18 operation contributed a percentage of the overall limit. The formula used for calculating the power density at ground level of UHF-TV antennas is:

$$S = \frac{(2.56)(1.64)(100)(F^{**2})[(0.4)(VERP) + (AERP)]}{4(PI)(D^{**2})}$$

Where:

S = Power Density at ground level in microwatts/square centimeter

F\*\*2 = Form factor of TV antenna squared.

(For this analysis a form factor of 0.1 was used)

VERP = Total peak visual ERP in watts

AERP = Total aural ERP in watts

PI = 3.1416

D\*\*2 = Distance (D) from ground to center of radiation squared (in square meters)

The following tabulation follows from the method described:

TABLE A

Station	HAG (m)	CH	Power		Power Density at Ground Level (mw/sq.cm.)	ANSI Limit (mw/sq.cm.)	% of TOTAL
			Visual (Kw)	Aural (Kw)			
NEW TV	101	18	3300	726	67.0096	1656.667	4.04%

## **ELECTROMAGNETIC COMPATIBILITY**

The proposed antenna site is not located within 60 meters of any known AM, FM, or television broadcast facility. There are several non-broadcast business band, two-way communications, microwave relay and local governmental radio stations located in the vicinity of the proposed site which, as noted previously, will be relocated to the proposed tower structure.

No adverse interaction is expected to occur between the proposed facility and any of the above listed facilities. Applicant acknowledges its responsibility to correct any problems caused by intermodulation interference resulting from its proposed operation of channel 18 with any of the above listed facilities. Remedial measures include, but are not necessarily limited to, the installation of traps and filters where appropriate. The applicant recognizes its responsibility to correct any prohibitive interference problems which are a result of its operation.

**Respectfully submitted,**

**Broadcast Technical, Inc.**

By



**Kenneth Devine**

July, 1989



**FIGURE 1**  
**ALLOCATION STUDY**  
**AMENDMENT TO APPLICATION FILE 831202KF**  
**NEW TELEVISION STATION**  
**CH. 18 3300 KW NON-D 244 METERS HAAT**  
**SHURBERG BROADCASTING OF HARTFORD**  
**HARTFORD, CONNECTICUT**

Channel 18 Zone I  
Database: DW 07/20/89

Latitude: 41-42-31  
Longitude: 72-28-26  
Safety zone: 120 km

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.	Zone	(kW)	HMSL	Longitude	-from	(km)	(km)
ALLOC		CHANNEL FROZEN	14 o			42-16-18	41.6	84.12	31.40
WORCESTER	MA		I			71-47-42	222.1	52.72	CLEAR
LMRS		DPLMRS CHANNEL SHARIN	14 o			42-21-24	57.9	137.7	31.40
BOSTON	MA	DOC-18261	I			71-03-25	238.9	106.3	CLEAR
CHECK 74.709 (B)(2) FOR EXCLUSIONS TO PROTECTED CONTOUR									
LMRS		DPLMRS CHANNEL SHARIN	15 o			40-45-06	230.6	166.0	31.40
NEW YORK	NY	DOC-18261	I			73-59-39	49.6	134.6	CLEAR
CHECK 74.709 (B)(2) FOR EXCLUSIONS TO PROTECTED CONTOUR									
PRM		PROPOSED RULE MAKING	16 o			41-49-32	81.3	89.30	31.40
PROVIDENCE-NEW B	RI	DOC-86-330	I			71-24-41	262.0	57.90	CLEAR
PRM		DELETION PROPOSED	16 o			41-49-32	81.3	89.30	31.40
PROVIDENCE	RI	DOC-86-330	I			71-24-41	262.0	57.90	CLEAR
Deletion proposed									
PRM		PROPOSED RULE MAKING	16 o			41-49-32	81.3	89.30	31.40
NEW BEDFORD-PROV	MA	DOC-86-330	I			71-24-41	262.0	57.90	CLEAR
ALLOC		CHANNEL FROZEN	16 o			41-49-32	81.3	89.30	31.40
PROVIDENCE	RI	DOC-18261	I			71-24-41	262.0	57.90	CLEAR
LMRS		DPLMRS CHANNEL SHARIN	16 o			42-21-24	57.9	137.7	31.40
BOSTON	MA	DOC-18261	I			71-03-25	238.9	106.3	CLEAR
CHECK 74.709 (B)(2) FOR EXCLUSIONS TO PROTECTED CONTOUR									
ALLOC			*17 +			42-43-56	315.7	160.4	87.70
ALBANY-SCHENECTA	NY		I			73-50-42	134.8	72.75	CLEAR
See SCHENECTADY NY									
WMHT		LIC MOHAWK-HUDSON COUNCIL	*17 +	2630	300	42-38-13	309.9	163.0	87.70
SCHENECTADY	NY		I			74-00-06	128.8	75.30	CLEAR
Allocated to ALBANY-SCHENECTADY N Y									
ALLOC		CHANNEL FROZEN	17 -			43-04-30	42.3	207.4	87.70
PORTSMOUTH	NH		I			70-45-24	223.4	119.7	CLEAR
WHCT-TV		LIC ASTROLINE COMM CO LTD	18 -	3273	301	41-46-30	285.3	28.20	248.6
HARTFORD	CT	BLCT-870304KI	I		386	72-48-04	105.1	-220	SHORT

**\*\* Note: Applicant is requesting facilities of WHCT-TV**

FIGURE 1, Page 2  
 ALLOCATION STUDY  
 AMENDMENT TO APPLICATION FILE 831202KF  
 NEW TELEVISION STATION  
 CH. 18 3300 kW NON-D 244 METERS HAAT  
 SHURBERG BROADCASTING OF HARTFORD  
 HARTFORD, CONNECTICUT

Channel 18 Zone I

Latitude: 41-42-31  
 Longitude: 72-28-26

Call City of License	Auth St	Licensee name FCC File No.	Chan Zone	ERP (kW)	HAAT-m HAMSL	Latitude Longitude	BR-to -from (km)	Dist. (km)	Req. (km)
ALLOC			*18 +			44-00-54	24.9	283.8	248.6
FRYEBURG	ME		II			70-58-48	205.9	35.22	CLEAR
ALLOC		CHANNEL FROZEN	*18 o			39-21-06	213.2	311.0	248.6
ATLANTIC CITY	NJ	DOC-18261	I			74-27-24	32.0	62.40	CLEAR
WNPI-TV LIC	ST	LAWRENCE VALLEY ET	*18 o	661	244	45-9-30	328.8	365.1	248.6
NORWOOD	NY		II			74-51-29	147.2	116.5	CLEAR
Allocated to MASSENA N Y									
WEIM-TV LIC	WEIM-TV INC		18 +	166	372	42-06-20	278.4	367.5	248.6
ELMIRA	NY		I	DA		76-52-17	95.4	118.9	CLEAR
WCDC	LIC	RIDDER PUBLICATIONS I	19 o	449	637	42-38-14	331.2	118.0	87.70
ADAMS	MA		I			73-10-07	150.8	30.34	CLEAR
Allocated to NORTH ADAMS MASS									
ALLOC			19 o			42-41-54	334.8	121.8	87.70
NORTH ADAMS	MA		I			73-06-36	154.3	34.14	CLEAR
See ADAMS MA									
WTXX	LIC	CHANNEL 20 LICENSEE I	20 o	2240	366	41-31-04	245.1	50.11	31.40
WATERBURY	CT		I			73-01-07	64.7	18.71	CLEAR
WLIW	LIC	LONG ISLAND ETV COUNC	*21 -	3160	122	40-47-19	219.0	131.0	31.40
GARDEN CITY	NY		I	DA		73-27-09	38.3	99.63	CLEAR
Allocated to LEVITTOWN N Y									
ALLOC			*21 -			40-43-30	218.8	139.8	31.40
LEVITTOWN	NY		I			73-30-48	38.1	108.4	CLEAR
See GARDEN CITY NY									
WWLP	LIC	ADAMS TV OF SPRINGFIE	22 o	3420	267	42-05-05	335.6	45.93	31.40
SPRINGFIELD	MA		I	DA		72-42-14	155.4	14.53	CLOSE

FIGURE 1, Page 3  
 ALLOCATION STUDY  
 AMENDMENT TO APPLICATION FILE 831202KF  
 NEW TELEVISION STATION  
 CH. 18 3300 KW NON-D 244 METERS HAAT  
 SHURBERG BROADCASTING OF HARTFORD  
 HARTFORD, CONNECTICUT

Channel 18 Zone I

Latitude: 41-42-31  
 Longitude: 72-28-26

Call City of License	Auth Licensee name St FCC File No.	Chan Zone	ERP (kW)	HAAT-m HAMSL	Latitude Longitude	BR-to -from (km)	Dist. (km)	Req. (km)
ALLOC		23 -			42-43-56	315.7	160.4	31.40
ALBANY-SCHENECTA NY		I			73-50-42	134.8	129.0	CLEAR
See ALBANY NY								
WFXT	LIC WXNE-TV INC	25 +	1950	357	42-18-12	57.1	123.2	95.70
BOSTON	MA	I			71-13-08	237.9	27.48	CLEAR
Was WXNE	01/19/87							
WNYE-TV APP	BD OF EDUC OF NEW YOR	*25 o	2432	395	40-44-54	230.3	165.7	95.70
NEW YORK	NY BNPET-890508KF	I	DABT	408	73-59-10	49.3	69.98	CLEAR
Accepted per FCC release #14463 dated 05/15/89; Electrical BT: 1.00 degrees								
WNYE-TV LIC	BD OF EDUC OF CITY OF	*25 o	646	177	40-41-21	228.5	169.5	95.70
NEW YORK	NY	I			73-58-37	47.5	73.75	CLEAR
WTWS	LIC C & S BROADCASTING CO	26 +	2792	381	41-25-05	144.6	39.61	31.40
NEW LONDON	CT	I	DA	447	72-11-55	324.8	8.207	CLOSE
Was WLCT	07/10/86							
ALLOC		32 +			42-35-18	353.8	98.30	95.70
GREENFIELD	MA	I			72-36-12	173.7	2.598	CLOSE
NO APPS ACCEPTED SUBJECT TO TV FREEZE								
WTVU	LIC MOHAWK VALLEY BCG INC	33 o	42.5	197	43-02-14	302.2	285.7	119.9
UTICA	NY BLCT-861210KG	I	DA	472	75-26-40	120.2	165.8	CLEAR

>> End of Channel 18 Study <<

**FIGURE 2**  
**TRANSMITTER SITE LOCATION MAP**  
**AMENDMENT TO APPLICATION FILE 831202KF**  
**NEW TELEVISION STATION**  
**CH. 18 3300 kw NON-D 244 METERS HAAT**  
**SHURBERG BROADCASTING OF HARTFORD**  
**HARTFORD, CONNECTICUT**  
**JULY, 1989**

### Proposed Transmitter Site

**41° 42' 30"**

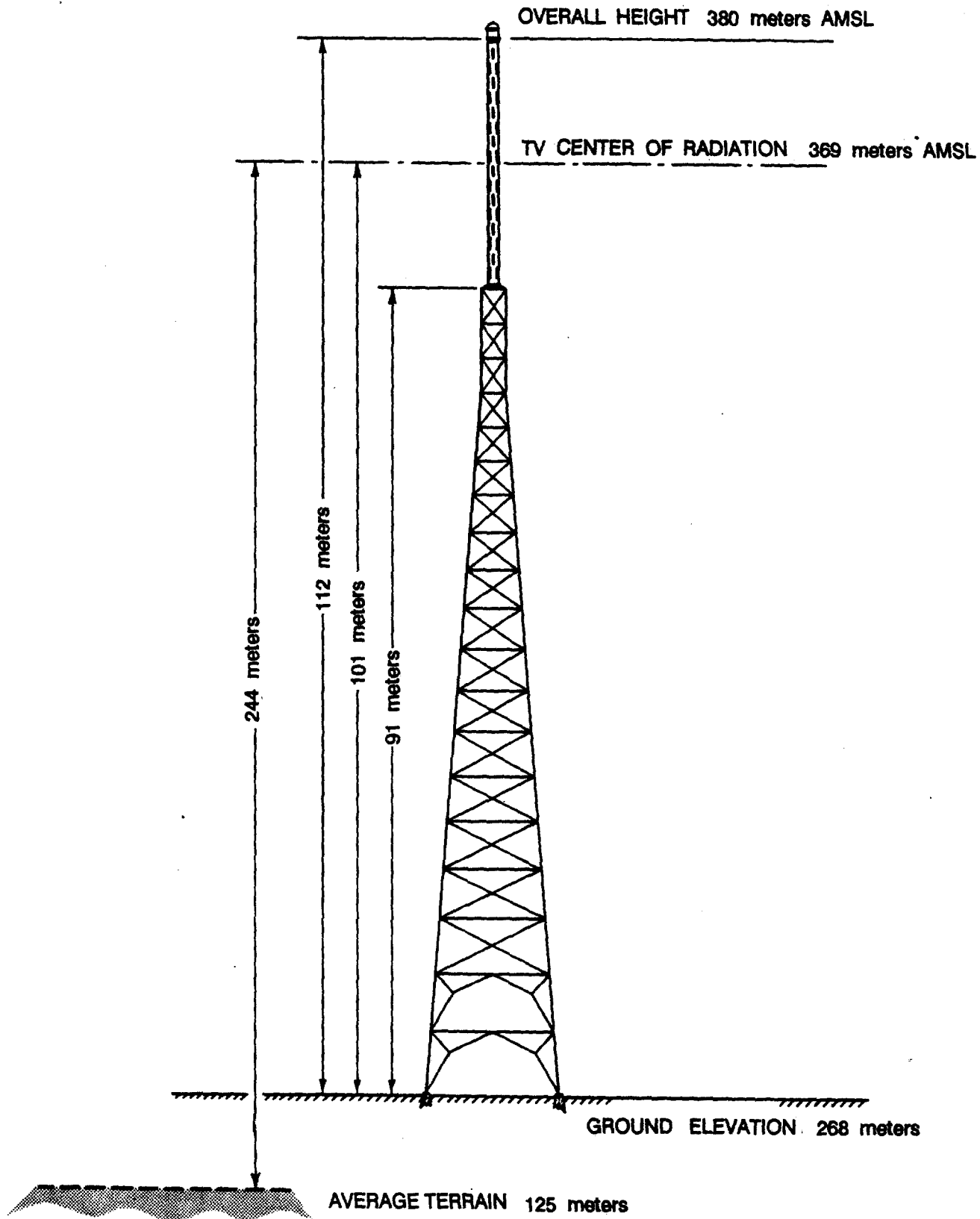
SCALE 1:24 000

CONNECTICUT

QUADRANGLE LOCATION

**MARLBOROUGH QUADRANGLE  
CONNECTICUT  
7.5 MINUTE SERIES (TOPOGRAPHIC)**

CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



N.  $41^{\circ} 42' 31''$

W.  $72^{\circ} 28' 26''$

*Not to Scale*

FIGURE 3  
VERTICAL PLAN SKETCH OF ANTENNA  
AMENDMENT TO APPLICATION FILE 831202KF  
NEW TELEVISION STATION  
CH. 18 3300 kw NON-D 244 METERS HAAT  
SHURBERG BROADCASTING OF HARTFORD  
HARTFORD, CONNECTICUT  
JULY, 1989

**FIGURE 4**  
**TABULATION OF ELEVATION AND CONTOUR DATA**  
**AMENDMENT TO APPLICATION FILE 831202KF**  
**NEW TELEVISION STATION**  
**CH. 18 3300 KW NON-D 244 METERS HAAT**  
**SHURBERG BROADCASTING OF HARTFORD**  
**HARTFORD, CONNECTICUT**

BEARING (DEG-TRU)	EFFECTIVE ANTENNA HEIGHT METERS	DEPRESSION ANGLE A <sub>h</sub>	% OF FIELD @ A <sub>h</sub>	EFFECTIVE RADIATED POWER (DBK)	CITY GRADE 80 DBU CONTOUR KM	GRADE A 74 DBU CONTOUR KM	GRADE B 64 DBU CONTOUR KM
0	230	.420	.98	35.19	48.7	57.2	72.1
45.0	205	.397	.98	35.19	47.2	55.6	70.1
90.0	207	.399	.98	35.19	47.3	55.7	70.3
135.0	226	.417	.98	35.19	48.5	57.0	71.8
180.0	228	.418	.98	35.19	48.6	57.1	72.0
225.0	233	.422	.98	35.19	48.9	57.4	72.3
270.0	318	.494	.98	35.19	53.8	62.9	80.8
315.0	302	.482	.98	35.19	52.9	61.9	79.1

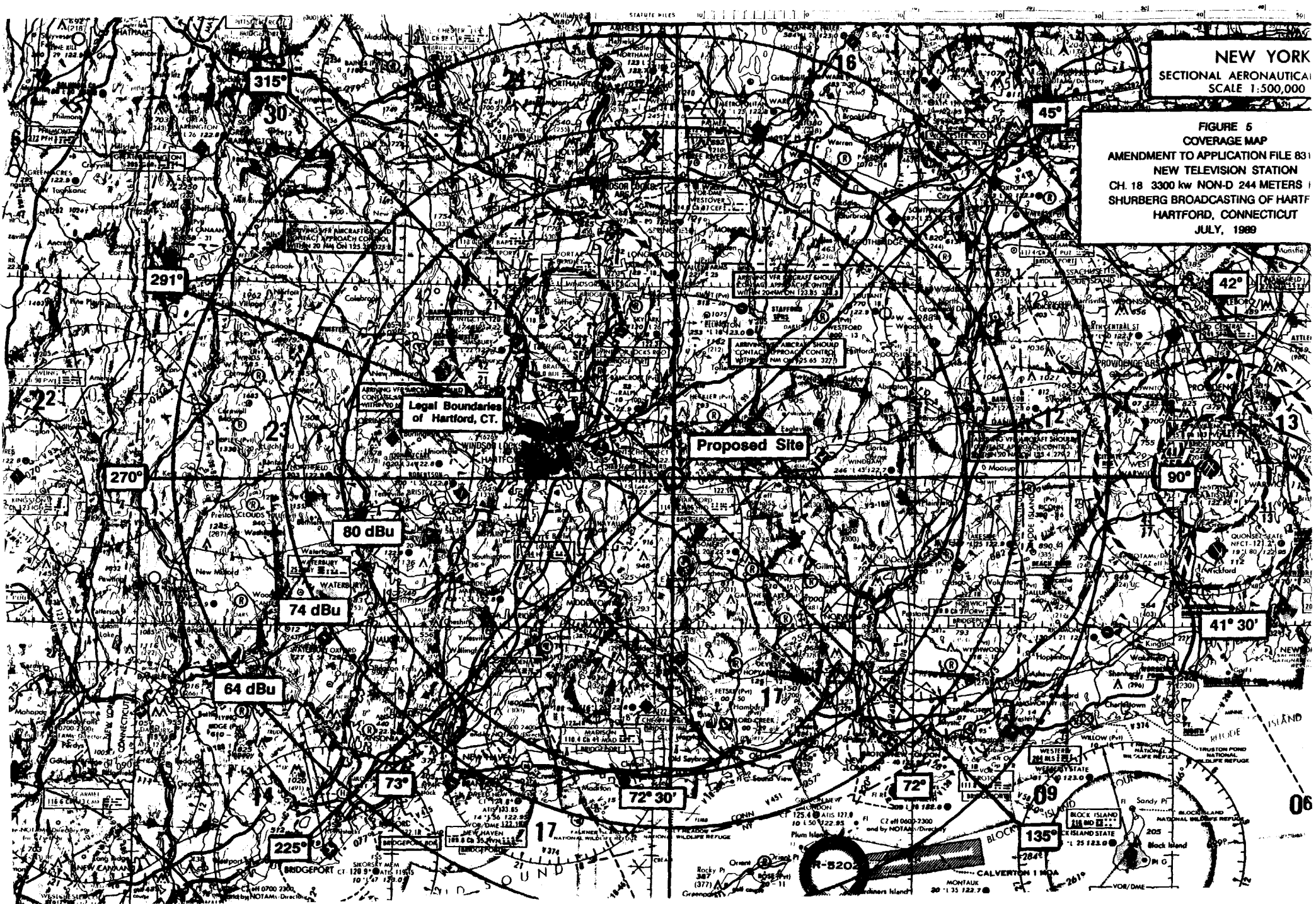
NORTH LATITUDE: 41 42' 31"

WEST LONGITUDE: 72 28' 26"

Height of radiation center above mean sea level: 369 meters

Height of average terrain above mean sea level: 125 meters

Height of radiation center above average terrain: 244 meters



**Bogner Broadcast Equipment Corp.**  
401 Railroad Avenue, Westbury, N.Y. 11590  
Tel: (516) 997-7800

**BOGNER®**

UHF high power antennas  
B series, catalog 201

Calculated vertical  
plane pattern

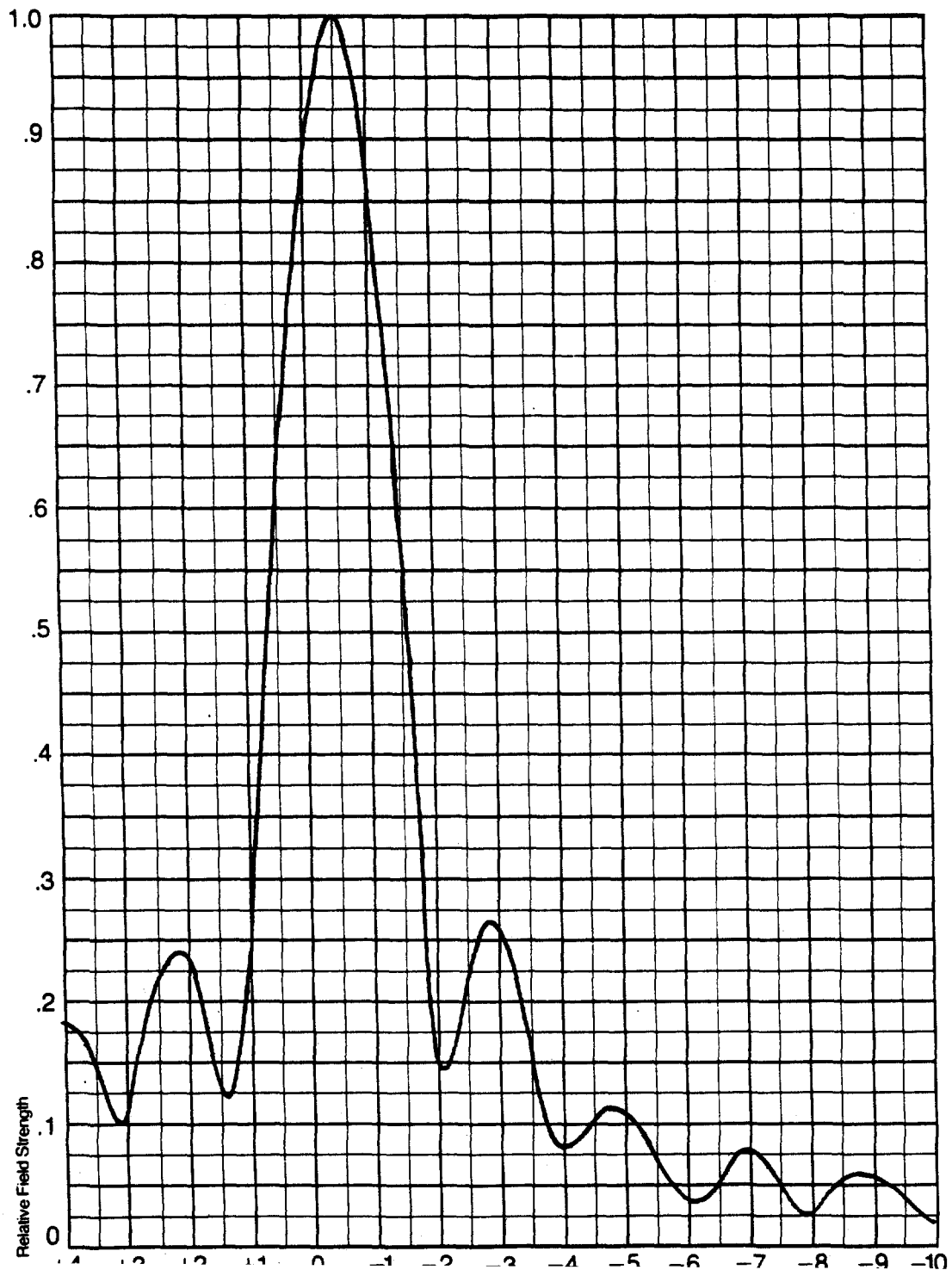
**Model BU( )32**

Power Gain: 35.0 (15.4 dB)

Hor. Gain: 26.5 (14.2 dB)

— ½° Electrical Beam tilt

FIGURE 6  
VERTICAL PLANE FIELD PATTERN  
AMENDMENT TO APPLICATION FILE 831202KF  
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SHURBERG BROADCASTING OF HARTFORD  
HARTFORD, CONNECTICUT  
JULY, 1989







U.S. Department of Transportation  
Federal Aviation Administration

## NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Aeronautical Study Number

## 1. Nature of Proposal

A. Type  
☒ New Construction  
☐ Alteration

B. Class  
☒ Permanent  
☐ Temporary (Duration \_\_\_\_\_ months)

C. Work Schedule Dates  
Beginning ECC  
End APPROVAL

## 3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code)

(203) 721-8240  
area code Telephone Number

Shurberg Broadcasting Of Hartford  
Mr. Alan Shurberg  
100 Cold Spring Road  
Rocky Hill, CT. 06067

## 2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

Antenna Tower  
UHF-TV Channel 18  
494-500 MHz  
3300kw

## B. Name, address and telephone number of proponent's representative if different than 3 above.

Kenneth Devine (504) 866-3846  
Broadcast Technical Inc.  
P.O. Box 13475  
New Orleans, LA 70185

(If more space is required, continue on a separate sheet.)

## 4. Location of Structure

A. Coordinates (To nearest second)	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flightpark, or seaplane base
41° 42' 31" N Latitude	Glastonbury, CT.	Heckler Field
72° 28' 26" W Longitude	(1) Distance to 4B Within City Limits Miles	(1) Distance from structure to nearest point of nearest runway 7.8 Miles
	(2) Direction to 4B	(2) Direction from structure to airport 32.9 degrees

## 5. Height and Elevation (Complete to the nearest foot)

A. Elevation of site above mean sea level	878
B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	369
C. Overall height above mean sea level (A + B)	1247

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (If more space is required, continue on a separate sheet of paper and attach to this notice.)

67-69 Birch Mountain Road, Glastonbury, Hartford County, Connecticut  
See Attached Chart

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$1000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature
July 24, 1989	Kenneth Devine, Telecommunications Consultant	<i>Kenneth Devine</i>

FOR THE

## The Proposer

- ☐ I am the owner of the structure.
- ☐ I am the owner of the land on which the structure is located.
- ☐ I am the owner of the structure and the land on which it is located.
- ☐ I am the owner of the structure and the land on which it is located, and I am also the owner of the structure and the land on which it is located.
- ☐ I am the owner of the structure and the land on which it is located, and I am also the owner of the structure and the land on which it is located.
- ☐ I am the owner of the structure and the land on which it is located, and I am also the owner of the structure and the land on which it is located.
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- ☐ I am the owner of the structure and the land on which it is located, and I am also the owner of the structure and the land on which it is located.

Remarks:

Issued in

FIGURE 7  
FAA FORM 746-1  
AMENDMENT TO APPLICATION FILE 831202KF  
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